DOCUMENT RESUME

ED 181 119 UD 020 019

AUTHOR Tilis, Howard S.
TITLE Evaluation of the 1977-1978 United States Elementary & Secondary Education Act--Title I and Impact Aid Programs in Community School District #6, New York, New York.
INSTITUTION Community School District 6, New York, N.Y.
PUB DATE 78
NOTE 66p.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Achievement: *Compensatory Education: Elementary Schools: Elementary Secondary Education: *English (Second Language): Junior High Schools: *Mathematics Education: Private Schools: *Program Evaluation: Public Schools: *Reading Programs: Underachievers
IDENTIFIERS *Elementary Secondary Education Act Title I: *New York (New York)

ABSTRACT

This evaluation focuses on the following components of New York City's District 6 Title I umbrella program: (1) a corrective reading program for grades 3-6: (2) junior high school supplementary reading labs: (3) compensatory mathematics labs for grades 3-9: (4) English as a Second Language (ESL) for Hispanic children in grades 1-9: (5) Project Striver, designed to raise the achievement level of marginal underachievers in grades 1-6: and (6) Project Success, for children functioning 3 or more years below grade level in reading and math. These programs were all present in the district's public schools. In addition, the evaluation covers: (7) a Title I reading program implemented in seven private schools in District 6. Concentrated upon are achievement data, structured observations, interviews, and the perceptions of the program by the Title I teachers and school administrators. Each component program is described in terms of target population, objectives, methods, evaluation procedures, and results. Copies of teacher surveys and collected survey responses are also included. Separate conclusions and recommendations are offered for each program. The overall effectiveness of Title I in District 6 is cited. (GC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED181119

DEC 3 - 1979

Copy I

EVALUATION OF THE 1977-1978 UNITED STATES ELEMENTARY & SECONDARY EDUCATION ACT - TITLE I AND IMPACT AID PROGRAMS IN COMMUNITY SCHOOL DISTRICT # 6 NEW YORK, NEW YORK

Program For Corrective Reading - Title I	-	5043-81652
Reading Lab For The Junior High Schools - Title I	-	5043-81653
Math Lab Program - Title I	-	5043-81654
E.S.L. Program - Title I	-	5043-81655
Project Success - Title I	-	5043-81656
Non-Public School Reading - Title I	-	5043-81657
Math - Title I	-	5043-81658
E.S.L. - Title I	-	5043-81659
Project Striver - Impact Aid	-	5043-88752

Submitted by:

Howard S. Tilis
Director of Research and Evaluation

Paul Treatman
Community Superintendent

James P. Roberts
Deputy Superintendent, Curriculum & Instruction

Martin W. Miller
Deputy Superintendent, Business & Administration

Armetta M. Cossingham
Director of Funded Programs

UD020019

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Ron Edmonds
New York City Public Schools
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Evaluation of the 1977-1978
United States Elementary & Secondary
Education Act - Title I and
Impact Aid Programs in
Community School District #6
New York, New York

Program For Corrective Reading	-	5043-81652
Reading Lab For The Junior High Schools	-	5043-81653
Math Lab Program	-	5043-81654
E.S.L. Program	-	5043-81655
Project Success	-	5043-81656
Non-Public School Reading	-	5043-81657
Math	-	5043-81658
E.S.L.	-	5043-81659
Project Striver	-	5043-88752

ACKNOWLEDGMENTS

It is with great pleasure that I express my appreciation to the Title I program staff of District 6 for their cooperation in the implementation of The Title I evaluation. In particular, I would especially like to acknowledge the continuous cooperation of Mrs. Armetta M. Cossingham, Director of Funded Programs, Mrs. Elizabeth Pruger, Coordinator of Reading, Mr. Al Grab, Coordinator of Math, Mrs. Pearl Weinstat, Coordinator of English as a Second Language. These truly professional persons understood the importance of the evaluative process to the improvement of educational programs, and assisted the evaluation team in the unbiased implementation of an evaluation strategy.

Also acknowledged is the faithful cooperation of the individual principals, teachers and educational assistants in the completion of this report. We applaud their patience in enduring the testing programs and unscheduled site visits.

Finally, I would like to offer my thanks and appreciation to Dr. Mark S. Brown and Mrs. Beatrice Bildner who functioned as evaluation consultants to this project. Dr. Brown had partial responsibilities for the development of observation schedules, questionnaires and some data analyses. Dr. Brown and Mrs. Bildner both conducted on-site observations. I would like to extend my appreciation to them for a job professionally done.

It is with sincere gratitude that I offer my thanks to Mrs. Peggy Matthews for typing this report under extreme pressure.

Table of Contents

	PAGE
Introduction	1-2
Program Component Evaluations	
Program For Corrective Reading (5043-81652)	3-13
Reading Lab For The Junior High Schools (5043-81653)	14-20
Math Lab Program (5043-81654)	21-29
E.S.L. Program (5043-81655)	30-36
Project Success (5043-81656)	37-42
Non-Public School Reading (5043-81657)	43-45
Math (5043-81658)	46
E.S.L. (5043-81659)	46
Project Striver (5043-88752)	47-54

INTRODUCTION

This evaluation report is concerned with the evaluation of the District 6 Title I Umbrella. The Title I umbrella, as the report will describe below, is composed of the following components:

Corrective Reading - Elementary
J.H.S. Reading LABS
Math LABS
E.S.L. LABS
Project Striver
Project Success
Non-Public School Reading
Non-Public School Math
Non-Public School E.S.L.

(The Non-Public School Math and E.S.L. components are being evaluated as part of the Central Board of Education component.)

The evaluation of a program as vast as this (in terms of monies and the number and diversity of children serviced) is a very difficult undertaking. However, in an attempt to provide a view of the program, the evaluation has concentrated on achievement data, structured observation, interviews, and the perceptions of the program by the Title I teachers and school administrators.

The evaluation of the program was conducted by an "in house" evaluator. The role of the evaluator was primarily to evaluate. The evaluator was not primarily involved in the development, organization, or operation of the Umbrella on a daily basis. The role of the evaluator was to assess the worth of the program and offer suggestions for its modification on an on-going basis.

To evaluate means to place a value judgment upon something - in this instance the Title I programs. In total perspective, the Title I programs in District 6 can be viewed as being very effective. The data indicate basic growth in all areas.

In reviewing the report it is important to keep in mind that the program, in general, was found to be very effective. However, in order to improve the program in future years an evaluative report basically concentrates on weaknesses which were obtained from observations, interviews and questionnaire data. Statements of difficulty or perceived weakness is not meant to infer that that is the case in every classroom observed or teacher interviewed; rather, it is an indication that this "phenomenon" occurs with some generalized regularity so as to be important to point out and search for meaningful educational remedies. It is hoped by the evaluator that this is the way in which the report will be utilized by District Office staff and school personnel.

In general, the program was implemented with very few discrepancies from the Title I Umbrella proposal. The primary reasons for this were the competence and conscientiousness of the Director of Funded Programs, the work of each of the District Office component coordinators, and the total support and commitment of the District Superintendent, Deputy Superintendent of Curriculum and Instruction, to compensatory education, and the dedication of the Community School Board.

CORRECTIVE READING
COMPONENT NO.: 5043-81652

PROGRAM DESCRIPTION

The Program for Corrective Reading is designed to support and supplement the regular tax levy reading programs in grades 3 - 6 in all Title I eligible schools in District 6.

The program provides corrective services to Title I eligible students who are one or more years below grade level in reading. These children because of lack of sufficient reading skills are also experiencing academic failure.

The Corrective Reading program utilizes a diagnostic-prescriptive approach. Small group and individualized instruction is provided by the corrective reading team: the teacher and paraprofessional.

An eclectic methodology is utilized in order to meet the individual needs of identified students. The program emphasizes phonetic analysis, structural analysis, vocabulary development and comprehension. Visual, motor, auditory and conceptual skills are taught as needed.

Students received small group (10-15 students) and/or individual instruction 3 - 5 times per week in a room designated as a reading laboratory. Each child was diagnosed so that specific deficiencies were identified and a prescription for instruction provided. The approach selected to teach a specific skill is the method found most viable for the student, and materials were selected accordingly. The most frequently implemented instructional approach was small group structured.

Corrective Reading teachers (CRT) teach a total of 28 forty-five minute periods per week servicing a minimum of 75 students. Each group met 3 - 5 times per week, depending on need. In addition the CRT spent two periods per week training the paraprofessionals assigned to the program.

One hundred and fifty (150) students per school participated (1500 students in 10 elementary schools). In the program 40 students were serviced in each school in grades 4, 5 and 6. Thirty (30) students were serviced in grade 3 in each elementary school. The CRT provided services to those students who were identified as most deficient in reading skills. (i.e. reading at least 1 or more years below grade level.)

Each of the 10 schools participating in this component had two teachers and two educational assistants assigned to the program. One teacher and one educational assistant was responsible for grades 3 and 4; and the other grades 5 and 6.

Evaluation Design

The purpose of this evaluation is to appraise student progress in reading skills in the above-mentioned setting. The appropriate level of the the Stanford Achievement Test (SAT) was used on a pre-posttest basis.

Behavioral Objective

Pupils participating in the program will demonstrate a statistically significant gain when actual and projected posttest SAT scores are compared using the SED historical regression formula.

Test Schedule:

Pretest:	October, 1977	Form B
Posttest:	May, 1978	Form A

Evaluation Procedures:

Historical regression equations will be calculated to compare the SAT actual posttest scores with anticipated posttest scores. As a derivative of this, an adjusted monthly growth rate will be calculated for this component. The null hypothesis to be tested is that there will be no statistically significant difference between posttest scores and projected growth using the historical regression equation.

In addition, the evaluation of the Corrective Reading component was expanded to include a structured observation of the program, interview of selected teachers and paraprofessionals, completion of a teacher and para questionnaire, and a principal opinionnaire. All of these aspects of the evaluation will be discussed below.

Reading Achievement

In order to determine whether children's reading achievement increased, all children who participated in the program were administered the Stanford Achievement Test in October 1977 and again in May 1978. The following levels and forms were administered to each grade level at pre- and posttest.

Grade	Pretest	Posttest
3	Primary II - Form B	Primary II - Form A
4	Primary III - Form B	Primary III - Form A
5	Primary III - From B	Primary III - Form A
6	Intermediate I - Form B	Intermediate I - Form A

All data were tabulated and analyzed using the SED historical regression formula. Table 1 presents a summary of these data by grade level. The table shows the pretest and posttest performance of all children on the Stanford Achievement Test, as well as the predicted posttest performance. This grade equivalent score is based on the number of years of school attended and pretest score. A correlated t-test was performed on the actual and predicted posttest. In all instances the children in the Title I program preformed statistically better than predicted.

TABLE 1

PRE AND POSTTEST RESULTS OF THE STANFORD ACHIEVEMENT TEST

GRADE	N	PRETEST	POSTTEST	GROWTH	PREDICTED POSTTEST	T-VALUE POST VS. PRED.	SIGNIFICANCE
3	396	1.8	2.7	9 months	2.1	11.912	<.001
4	379	2.3	3.1	8 months	2.7	11.436	<.001
5	385	3.4	4.3	9 months	3.9	9.258	<.001
6	408	4.0	5.2	8 months	4.5	13.396	<.001

At grade 3 the growth from pre-to posttest was 9 months; at grade 4, 8 months; at grade 5, 9 months and at grade 6, 8 months. This magnitude of growth, as stated above,is statistically greater than what would have been predicted. This growth is also consistent with at least a month for month growth of participation in the program. A month for month growth is greater than these children would have been expected to make had they not participated in the program. The average length of time the children participated in the program was about 8 months (i.e. time from pre-to posttest).

These data are quite encouraging and seem to lend some support to the fact that the program is beginning to reverse the trend of failure among this population. Remembering that these are children who have not made month for month growth during the years of school attendance (i.e. more than 1 or more years below grade level in reading), these results are very encouraging.

Observation of the Program

At least one Corrective Reading Lab in each of the participating schools was observed using a structured observation schedule designed specifically for that purpose. The structured observation covered the following areas: physical facilities, instructional material, planning, assessement, program implementation, teacher-student communication, role of educational assistant. The observation guide also grovided some opportunity for the observer to record additional information (see appendix). The observation guide was constructed using the Title I proposal as a guide to determine the areas important to program implementation and success. The major purpose of the observations was to determine the extent to which the program was being implemented as planned.

The observations, in general, showed that the program demonstrated evidence of the following:

- well organized objectives for children
- accessible diagnostic/prescriptive data
- written plans of instruction
- well organized, on-going assessment procedures
- observable evidence of individualized instruction
- observable evidence of small group instruction based on student needs

The communication between the student and teacher seemed to be flexible enough to allow for good teaching strategies. Likewise, the teacher-educational assistant relationship in general was good so as to provide an atmosphere of natural cooperation and maximum effectiveness in the classroom.

Physical space is limited in some schools; however, many teachers used ingenuity in providing an attractive setting.

Evaluation of Questionnaire Data

An extensive questionnaire was specially prepared for teachers and educational assistants participating in the program to complete. Principals were also requested to complete an opinionnaire.

Table 2 below presents some relevent statistics concerning important characteristics of all the Title I programs. The Corrective Reading program data are highlighted in the first column. Nineteen teachers who responded have a total of 312 years of teaching experience, with an average of 16.4 years per teacher - the range is 8 years to 29 years. Educational assistants average 7.8 years of experience in the classroom. In addition, the CR teachers, on the average, have worked for 3.2 years in the program. Forty percent of the teachers have been in Title I for 5 to 8 years. The program obviously has a very experienced group of teachers.

Responses to questionnaire items, confirmed by observation and review of program cards, indicate that teachers are teaching 28 periods per week. Sixty percent are working five times per week with student groups; 25%, 5 times per week and 15%, three times per week. These frequencies are within the guidelines of the Title I proposal.

Table 2

SOME RELEVANT STATISTICS CONCERNING TITLE I PROGRAM
(1977-78)

	Corrective Reading Elementary	JHS-CR	STRIVER Elementary	Math Elementary-JHS	E.S.L. Elementary-JHS
No. of Teachers in Program	20	9	10	13	13
No. of Paras in Program	20	27	10	16	23
Years Teaching Experience	16.42	14.14	11.8	12.36	16.44
Years in Program	3.2	4.5	.75	3.2	6.9
Stability Rate of Program	91%	83%	93%	88%	89%

Table 3 presents percentages of Corrective Reading Program teachers' ratings of a variety of program components. By inspection, one sees that the majority of teachers perceive these program components positively. The only percentages in the direction of ineffectiveness were "amounts of materials", "physical facilities", "diagnostic evaluation", and "coordination with tax levy program".

Observations in classrooms call into some doubt concern over amounts of materials. A wide variety of materials seemed available to CR teachers and E.A.'s. Some teachers were observed, however, not utilizing materials or not effeciently managing a total classroom resource system to maximum effectiveness for small groups or individual needs. Physical space was limited in some schools; however, most teachers used ingenuity in providing an attractive setting. Concern with diagnostic evaluation may simply be symptomatic of teachers' concern with too much testing, or time delays for access to pupil data. Yet, this concern may also reflect a need for more experience with implementation of informal diagnostic procedures in teaching reading (even, with centuries of teaching, diagnostic strategies demand training).

The most dramatic concern was with coordination with tax-levy programs. Classroom observations corroborate the desire most CR teachers have to formalize more of their communicative opportunities with tax levy teachers beyond the happenstance meetings in corridors in pick-up of children. This concern is also ranked high by educational assistants and principals.

An interesting finding was highlighted when teachers were asked to rank order the 3 "best" instructional materials they use in their program. There was very little unanimity among the teachers. Twenty-eight different commercially published programs (as well as teacher made materials) were listed. Of these, the following were most frequently cited: Cambridge, Random House, Barnell-Loft, SRA and Contained Reader.

Table 4 below presents the ratings of the teachers concerning various aspects of the program as well as supportive services. The ratings were all made on a five point scale where 1 is low and 5 is high. As can be seen most of the ratings are on the neutral to slightly positive end of the continuum.

Table 3

Responses of Corrective Reading Program Teachers to the Question:

How would you rate the following aspects of the Program?

Aspects of Program	Very Ineffective 1	2	3	4	Very Effective 5
a. Amt. financial resources	10%	-	40%	25%	25%
b. Access to above	20%	10%	15%	15%	40%
c. Variety of materials	15%	5%	25%	20%	35%
d. Significant amounts of materials available	5%	20%	25%	30%	20%
e. The organization of staff	-	-	30%	25%	45%
f. Staff spirit or morale	-	10%	20%	40%	30%
g. Quality of staff performance	-	5%	15%	40%	40%
h. Quality of projects	-	-	25%	40%	35%
i. Administration	-	5%	10%	45%	40%
j. Student interest	-	-	25%	50%	25%
k. Student motivation	5%	5%	25%	50%	15%
l. Student performance	-	15%	40%	45%	10%
m. Cooperation from school performance	5%	-	20%	65%	10%
n. Selection procedures for pupils in the program	5%	10%	25%	45%	15%
o. Physical facilities	10%	10%	35%	20%	25%
p. Time allotted for pupils receiving instruction	-	10%	30%	50%	10%
q. Number of pupils in each group	-	10%	45%	40%	5%
r. Diagnostic evaluation	-	20%	45%	20%	15%
s. Coordination with tax-levy program	10%	40%	30%	10%	10%

Table 4

TEACHER PERCEPTIONS OF VARIOUS ASPECTS OF THE PROGRAM AND OF DISTRICT SUPPORT SERVICES

	Corrective Reading
Workshops	3.76
Pullout system	4.30
Pre-post testing	3.74
District Staff Liaison	4.05
Administrative Support	3.68

Corrective reading teachers and educational assistants were requested to prioritize the appropriate activities of an educational assistant. Table 5 presents these data.

Table 5

RANK ORDERING OF ACTIVITIES OF EDUCATIONAL ASSISTANTS BY CR TEACHER & EDUCATIONAL ASSISTANTS

	CR Teacher		Educational Assistant	
	Avg. Rating	Rank	Avg. Rating	Rank
Review	4.38	(4)	5.0	(6)
Drill	3.4	(3)	3.95	(4)
Present New Materials	7.6	(9)	4.45	(5)
Individual	2.17	(2)	3.75	(3)
Small Group	1.84	(1)	1.86	(1)
Grading	5.33	(6)	3.52	(2)
Liaison w/parents	9	(11)	9.64	(11)
Planning	4.82	(5)	5.05	(7)
Clerical	6.9	(7)	6.00	(8)
Test Admin.	8.5	(10)	7.72	(9)
Test Corrections	7.27	(8)	7.9	(10)

There are several distinctive differences in perception of the E.A. role between CR teachers and E.A.'s. In activities of "review", "present new material", "grading" there are obvious discrepancies. It must be noted that there are also many consistencies of perception, especially relating to top two priorities (small group work, individualization) and last two (liaison with parents, testing).

It is clear, however, that unless there is near to total agreement as to the perception of roles, the classroom team will not be a well-functioning unit.

An important consideration in the apparent success or failure of any program is the way in which the principal of a school perceives the program. In line with this, input was requested from the principal by means of a specially prepared opinionnaire.

The following are composites drawn from principals of six schools who returned the opinionnaire regarding the funded programs in their schools.

1. Major Strengths:

Competent teachers provide a variety of instructional methods to children with serious deficiencies based on a careful diagnosis of their needs.

The primary instructional mode is small group, with some individualization.

Concern for the child's self image in addition to his/her reading skills is also considered an important strength.

Principals also cite climate of relaxed cooperation as an important factor. Also teacher flexibility was mentioned.

2. Major Weaknesses

Several principals identify weaknesses in the assessment component. These include: lateness in getting diagnostic results to teachers; unnecessary formal testing of late admissions to program.

Other concerns: conflicts between concurrent programs; lack of lab space; difficulty in placing or dropping students from program; number of contact hours student has access to instruction.

3. Suggestions:

There is a need to reorganize priorities by which students are placed in the Title I program.

There is a need for coordination of Title programs.

An additional educational assistant per teacher.

Additional audio-visual equipment.

Establishment of referral system for learning disabled students.

Pre-testing earlier in school year (September).

Parent workshops in reading.

Monthly workshops not scheduled during Open School Week.

Reduce teaching periods from 28 to 27, or reduce educational assistants training to one period to provide time for record keeping.

Have some funded teacher work in math and reading.

Equal sharing of school duties.

Recommendations

As a function of the evaluation of this program the following is recommended;

1) Full recycling of this highly successful program for the academic year 1978-79.

2) To relieve concern over coordination with tax-levy program, the district office should select a task force in early September to come up with recommendations by the end of September for district-wide measures to narrow the gap between these programs. These task forces should represent administrator, district office, Title I and tax-levy teachers and E.A.'s. Further, at the school level each building administrator should develop a plan with a similar type of task force in his/her own building to coordinate and formalize communication between Title I and tax levy programs by October 31, 1978. These district and school plans might well be set up according to an "MBO" format for ease of monitoring during 1978-79 school year.

3) Some labs do not provide maximal opportunities for individualized learning, nor diversified small groups. Often, twelve to fifteen students are simply divided into two parallel, homogeneous groups, the lowest one for teacher and the other for educational assistant. Each group receives the same instruction. We would recommend more administrative support for teachers and E.A.'s to learn alternative tactics for individualizing. We also suggest that individualization be de-mystified through district-wide inservice sessions which focus on informal diagnostic-prescriptive methods; diversified instructional media, etc. Also, teachers and E.A.'s indicate desire for "sharing practice" sessions at district level (along with visitations). These are excellent, but should be tied into an identifiable district-wide management system.

4) Problem solving sessions should be implemented district-wide to build consensus among teachers and E.A.'s for what the E.A. role in programs

should be (including role of E.A. in planning with teacher, shared inservice, etc.) The basically positive attitude in District 6 towards these programs denotes a generally effective educational climate. Yet, the most critical need pointed up in observation is clarification of individualization practices.

5. Provision should be made for identification of "learning disabled" children to another source. The Corrective Reading program is designed as a remediation program teaching skills development; the program is not set up to deal with neurologically impaired children.

6. Some method other than that currently used should be used to diagnose reading difficulties. The method selected should be such that the same diagnostic information is provided with savings in time and money.

7. Provision should be made to drop children with excessive absences or severe behavior problems. A common definition of excessive absence and behavior problems should be established at the first workshop.

J.H.S. Reading Lab
Component No.: 5043-81653

Program Description

The J.H.S. Reading Lab program provides supplemental reading instruction in each J.H.S. in the district in order to assist students who are one or more years below grade level.

The program utilizes a diagnostic-prescriptive approach. Small groups and individualized instruction were provided by the corrective reading team, 1 teacher and 3 educational assistants per school.

An eclectic methodology was utilized in order to meet the individual needs of identified students. The program emphasized phonetic analysis, structural analysis, vocabulary development, comprehension and study skills.

The reading program was coordinated with content areas in order to insure transference of reading skills.

The objectives of the program are:

1) Provision of supplementary reading instruction to the regular tax levy reading.

2) Identification of specific deficiencies through diagnostics (Fountain Valley and/or Roswell-Chall).

3) Classification of reading skills into the following categories: phonetic analysis, structural analysis, vocabulary development, comprehensive and study skills.

4) Exposure and motivation of the below level reader to reading materials which will sustain their instructional reading and enable them to attack skills, providing reading instruction by introducing the use of multi-media materials to meet individual needs.

5) Coordination with the content area teacher to insure articulation of reading skills lessons.

Students received instruction in small groups (15-20) or individual instruction 3 - 5 times per week in a room designated as a reading laboratory. Multi-media and all other appropriate materials were maintained in the reading laboratory. Each child was diagnosed so that specific deficiencies were identified and a prescription for his instruction were provided and folder maintained. The approach selected to teach a specific

skill was the method found most viable for the student, and materials were selected accordingly.

The reading specialist taught a total of 25 forty five minute periods per week, servicing 100 students. Each group met 3 - 5 times per week. In addition, the reading specialist spent two periods per week training the paraprofessionals assigned to the program.

All middle schools in the district participated in the program. JHS 52 and JHS 143 serviced 100 students per grade. IS 164 also serviced 100 students per grade level.

The reading specialist worked with 2 - 3 paraprofessionals to implement the team approach. The reading specialist worked with those students who had been identified as most deficient. The specialist in conjunction with the educational assistants administered diagnostic and achievement tests, and provided diagnosed disabilities. The specialist trained the educational assistant for two periods per week and will hold conferences with parents and tax levy teachers of participating students. The specialist provided instructional services 25 periods per week for forty weeks. The specialist supplied appropriate reading materials to tax levy teachers of participating students in order to meet the individualized needs of those students.

EVALUATION DESIGN

The following is the evaluation procedure submitted to and approved by the N.Y.S. Department of Education. In addition to what is specified below, the evaluation of this program was supplemented by structured observation and solicitation of feedback concerning the program via questionnaires. (See appendix for copies of the instrumentation).

Behavioral Objective

Pupils participating in the program will demonstrate a statistically significant gain when actual and projected posttest SAT scores are compared using the SED historical regression formula.

Evaluation Design

The purpose of this evaluation is to appraise student progress in reading skills in the above-mentioned setting. The appropriate level of the Stanford Achievement Test will be used on a pre/post test-basis.

Test Schedule:

Pretest:	October, 1977	Form B
Posttest:	May, 1978	Form A

Table 6

PRE & POSTTEST RESULTS USING THE STANFORD ACHIEVEMENT TEST

Grade	N	Pretest	Posttest	Growth	Predicted Posttest	T- Value Post Vs. Pred.	Significances
6	58	3.5	4.7	1.2	3.85	5.06	<.001
7	297	4.5	5.1	.6	5.0	1.592	N.S.
8	331	5.1	6.5	1.4	5.6	10.968	<.001
9	302	4.9	6.2	1.3	5.3	11.216	<.001

The SED historical regression equation will be calculated to compare the SAT actual posttest scores with anticipated posttest scores. As a derivative of this, an adjusted monthly growth rate will be calculated for this component. The null hypothesis to be tested is that there will be no statistically significant difference between posttest scores and projected growth using the historical regression equation.

READING ACHIEVEMENT

The following levels and forms of the Stanford Achievement Test-Reading was administered to all program participants. The pretest was administered in October 1977 and the posttest in May 1978.

Grade	Pretest (10/77)	Posttest (5/78)
6	Intermediate I - Form B	Intermediate I - Form A
7	Intermediate II - Form B	Intermediate II - Form A
8	Advanced - Form B	Advanced - Form A
9	Advanced - Form B	Advanced - Form A

As can be seen in Table 6 below, all program participants entered the program reading on the average over 2 years below grade level. This meets the minimum requirement of reading at least 1 year below grade level.

Table 6 also indicates that at all grade levels, except grade 7 the students performed statistically better than what was predicted using the SED historical regression formula.

In terms of actual pre-to posttest growth over an 8 month period, students in grade 6 achieved 1-2 years growth; grade 7, 6 months growth; grade 8, 1-4 years growth; and grade 9, 1.3 years growth. These results, as well as those presented for the elementary Corrective Reading Program, are impressive. They attest to the fact that through a structured small group, diagnostic-prescriptive program one can reverse and begin to ameliorate the negative trends of low achievement.

OBSERVATION OF THE PROGRAM

Structured observations were completed of at least one reading lab at each school. The observations basically indicated that the program was being implemented as specified in the Title I proposal. The proposal stated that 900 children would be serviced in the program. In actuality approximately 1000 children were serviced. The only grade level which did not service 100 children was grade 6.

Diagnostic and prescriptive folders were maintained for each child, although evidence of updating was not always present. Instructional materials, commercial and teacher made, were abundent at each site. It is suggested that some procedure be established to "share" or coordinate all materials with the classroom reading program. In this way the child would benefit from a continuous developmental reading program using the same materials.

Most of the schools in District 6 are overutilized; there is a continuous "space" problem. The physical space of the program was not always the most conducive for learning; however, the teachers and educational assistants used their ingenuity and, in most instances, were able to transform a space into a workable learning environment. I think this is quite a valuable feat.

Although the Title I proposal requires that the instructional design be one of small group or individual teaching to a child's diagnosed needs, there was some observational evidence that this was not always the case. The observations highlighted the fact that some workshops, at the beginning of the year, should be devoted to the process of diagnosis and prescription and the working with small groups. In addition, a program should be established for inter-visitations between programs. Examplary programs should be selected for other funded teachers and educational assistants to visit.

EVALUATION OF JUNIOR HIGH SCHOOL CORRECTIVE READING QUESTIONNAIRE

As with each of the Title I programs in District 6, the JHS Corrective Reading program was implemented by highly experienced teachers, with an average of 14.5 years of teaching and a range 7 to 33 years. Table 2 shows that they had been in the program for 4.5 years. The table also indicates that the program had its full complement of 9 teachers - 3 per school and 3 educational assistants for each reading lab.

Table 7 describes nineteen aspects of the program which eight of nine teachers rated. By observation one notes the ratings are quite high, consistent with the ratings of Title I teachers in elementary grades. Junior Hign teachers rate as "least effective" the coordination with tax-levy teachers.

Diagnostic-prescriptive approaches were rated quite high (4.14). Observations in several classrooms confirm that there was systematic implementation of such strategies. This included the use of such systems as the Prescriptive Learning System.

Teachers have indicated they would like opportunities to visit classrooms where successful management systems support diagnostic-prescriptive teaching. This should be included as a part of a total inservice program, since it concretizes approaches talked about at monthly after-school meetings. (This is reinforced by the observations).

Junior High School teachers were somewhat conservative in their rating of monthly district in-service workshops in general (3.43), and more generous in their rating of district liaisons (4.86) and school administrative support (4.29).

Table 7

Percentages of Responses of Junior High School Corrective Reading Teacher to the Question: How would you rate the following aspects to the program?

Aspects of Program	Very Ineffective				Very Effective
	1	2	3	4	5
a. Amt. financial resources			38%	25%	38%
b. Access to above		13%	13%	50%	25%
c. Variety of materials			30%	35%	38%
d. Significant amounts of materials available			13%	50%	38%
e. The organization of staff				63%	38%
f. Staff spirit or morale			13%	13%	63%
g. Quality of staff performance			13%	63%	25%
h. Quality of projects			25%	50%	25%
i. Administration			13%	50%	38%
j. Student interest			13%	38%	50%
k. Student motivation			25%	38%	38%
l. Student performance			25%	38%	50%
m. Cooperation from school performance		13%	38%	25%	38%
n. Selection procedures for pupils in the program	13%		25%	25%	38%
o. Physical facilities	13%	13%	25%	25%	25%
p. Time allotted for pupils receiving instruction		13%	25%	25%	38%
q. Number of pupils in each group				38%	63%
r. Diagnostic evaluation		25%	25%	25%	25%
s. Coordination with tax-levy program	25%	50%	13%	13%	

Teachers saw the pull-out program as highly successful (5.0) but had reservations about the pre-post testing component (3.29). Further, their ratings of budget for the program ranged from 3.71 for facilities, 4.29 for materials and for equipment.

Finally, Table 8 presents the rank ordering of teacher assistant activities as perceived by teachers.

Table 8

RANK ORDERING OF ACTIVITIES OF EDUCATIONAL ASSISTANT BY TEACHER

Activity	Rating	Rank
Work with individual children	3.0	1
Work with small group	3.43	2
Drill of Specific Skills	4.0	3
Review what teacher has taught	4.86	4.5
Grading the daily work of children	4.86	4.5
Clerical Duties	6.57	6
Present new materials	6.7	7
Administering Tests	7.14	8.5
Correcting Tests	7.14	8.5
Planning Activities with Teacher	7.57	10

The one striking differences between Junior High Lab program and Elementary Corrective Reading teachers are found in their perception of "planning with teacher" which was ranked by elementary teachers much higher (4.82). It seems that district-wide clarification is essential to ensure that the educational assistant's role is consistently structured.

Recommendations

1) Full recycling of this highly successful program for the academic year 1978-79.
2) Additional district-wide inservice training to present various models for diagnostic-prescriptive teaching.
3) A procedure should be established, as discussed in the recommendations concerning the elementary Corrective Reading program, for the more formalized communication between tax-levy and funded program teachers.
4) Also as discussed in the recommendation concerning the elementary Corrective Reading Program, there should be some early workshops concering the clarification of the educational assistants role in the classroom.
5) Additional opportunities should be provided for intervisitation between schools. Model programs should be observed by funded teachers.
6) Some other method should be used to diagnose reading difficulties than is currently used. The method selected should be such that the same diagnostic information is provided with savings in time and money.

Mathematics Laboratory
Component No: 5043-81654

PROGRAM DESCRIPTION

The Math Laboratory Program was designed to provide services to eligible Title I children in the elementary schools and in the Junior High Schools who were one or more years retarded in mathematics.

The Mathematics Laboratory Program attempted to raise the computational skills of the under achieving students in mathematics.

The laboratory sessions provided practice in mental and written computation, verbal problem solving, and in basic arithmetic skills.

The program operated in 13 schools with a total of 13 teachers and 16 educational assistants. Each of the 13 schools contained one Math Lab.

The math skills teacher taught a total of 28 forty-five minute periods in the elementary school. In addition, two periods were designated conference periods for staff training or individual conferences with the students or teachers. In the Junior High Schools the teacher instructed 40 minute periods per day for a total of 25 periods per week.

On beginning the program, every student was diagnosed as to his specific skill deficiencies with the Stanford Diagnostic Math Test. The results of the diagnostic test combined with the suggested comments from the regular teacher, provided the necessary information for planning a learning schedule for the student. Detailed information was maintained on each participating student, in the form of progress profiles and diagnostic data. The profile provided a graphic analysis of each individual student's basic arithmetic strengths and weaknesses, and served as the basis for work and instruction.

Small groups and individuals received instruction in multisensory approach to learning. Mathematics laboratory equipment was used to facilitate this personalized learning. Remedial teachers were encouraged to use a developmental approach to enable the children to discover relationships from generalizations. The laboratory sessions included manipulation of materials, practice in mental and written computation and practice in verbal problem solving. Prescribed programs of corrective instruction were developed. Remedial groups tended to be small to insure maximum teacher-pupil interaction. Specifically, small groups of 10-15 children were provided one teacher and one educational assistant for instruction. This number was broken down into a variety of ad hoc instructional regroupings depending on an individual students' needs and on utilization of program resources (math kits, manipulatives, workbooks, et cetera).

EVALUATION DESIGN

Behavioral Objectives

Pupils participating in the program will demonstrate a statistically significant gain when actual and projected post-test SAT scores are compared using the SED historical regression formula.

Evaluation Design

The purpose of this evaluation is to appraise student progress in math skills. The appropriate level of the Stanford Achievement Test will be used on a pre/posttest-basis.

Test Schedule:

Pretest:	October, 1977	Form B
Posttest:	May 1978	Form A

Historical regression equation will be calculated to compare the SAT actual posttest scores with anticipated posttest scores. As a derivative of this, an adjusted monthly growth rate will be calculated for this component. The null hypothesis to be tested is that there will be no statistically significant difference between posttest scores and projected growth using the historical regression equation.

MATH ACHIEVEMENT DATA

The following levels and forms of the SAT Math were administered to all program participants.

Grade		Form B (10/77)	Form A (5/78)
3	Primary II	"	"
4	" III	"	"
5	Intermediate I	"	"
6	" " II	"	"
7	" " III	"	"
8	Advanced	"	"
9	Advanced	"	"

Table 9 summarizes the pattern of growth in math achievement by grade level. Actual pretest and posttest performance of all students are presented along with the predicted posttest performance. The predicted posttest score is an estimated expectancy of math achievement indicated by a grade equivalent score. The estimate is derived from number of years the student attended school and the student's pretest score. A correlated t-test was performed between the actual and predicted posttest scores. At all grade levels Title I students in the math program performed statistically better than predicted.

Table 9

PRE AND POSTTEST RESULTS USING THE STANFORD ACHIEVEMENT TEST - MATH

Grade	N	Pretest	Posttest	Growth	Predicted Post	T-Value Post-Pred.	Significance
3	140	2.0	2.9	.9 months	2.4	7.860	<.001
4	243	2.6	3.9	1.3 months	3.1	13.320	<.001
5	312	3.1	4.4	1.3 months	3.5	11.971	<.001
6	223	4.1	5.1	1.0 months	4.6	6.499	<.001
7	97	4.8	5.9	1.1 months	5.3	4.319	<.001
8	142	5.2	6.3	1.1 months	5.6	4.182	<.001
9	44	5.6	7.9	2.3 months	6.1	2.207	<.001

23

At grade 3 growth was nine months; at grade 4, one year three months; at grade 5,one year three months; at grade 6, one year; at grades 7 and 8, one year one month and at grade 9, the most dramatic increase, two years three months. Since 89% of the students averaged 8 months participation in the program, the magnitude of growth on a month for month basis, indicates well over "one month gains" for each month in the program at each grade level.

Participation in the Title I math program did lead to statistically significant benefits to targeted students which were well beyond the predicted expectation of success. Such favorable outcomes speaks well for the instructional staff and district coordination. The results are optimistically consistent with the "reversal of failure" trend noted already for Title I corrective reading.

OBSERVATION OF THE PROGRAM

As discussed in the evaluation of the Corrective Reading Program, a detailed observation instrument was developed to analyze a variety of dimensions of the program.

Observation in Title I Math Labs provided for a kaleidoscope of data. Approximately one third of the classrooms demonstrated highly competent math management systems, including an instructional programming model which moved fluidly from diagnosed student needs to diversified instructional modalities. While individualization techniques such as individual contracts and programmed instruction were sometimes observed,there was an effective implementation of small group instruction and some tutorial opportunities.

Record keeping was successfully managed and teacher-made ongoing assessment tools were used consistently to gauge student progress. The cooperative climate in the classroom was seen between adults, and between adults and students. Communication with tax-levy teachers was primarily informal, an observation supported elsewhere in the data.

Eighty-nine percent (89%) of the students participated in the program for eight months while 4.7% participated for nine months, and 6.3% for three to seven months. The teachers own perceptions of stability are consistent with these figures. Table 2 of this report presents a summary of this data along with teacher experiential information for each of the Title I programs.

Teachers in the elementary school program teach 28 periods per week and the JHS teachers, 25 periods per week. Each lab services each of their groups a minimum of 4 times per week. This is quite important to the effective functioning of a program which the majority of teachers perceive as small group or individualize instruction. All teachers also perceive of the diagnostic-prescriptive approach utilized in the program as positively effective. Observation of the LAB's indicate that the program does basically utilize a small group approach, but not necessarily individualized. It is imperative that some early workshops be devoted to the individualization of instruction. In line with

this, it is important to note that most teachers believed they had little to no difficulity with on-going diagnosis and prescription - the basis of an individualized program. Observation and review of student folders showed little updating of diagnostics or changes in prescription. This does not mean, however, that teachers did not do this in an informal sense. It is recommended that this be done in a more formal way. School administrators should be cognizant of the fact that teachers whose salary is paid out of Title I monies are required to teach a specified number of periods per day and that any deviation from this is a "violation" of the District's comittment.

Observations supported other evidence of diversity of materials in Math Labs. Nevertheless, in at least one third of the schools visited, the utilization of these materials was restricted either by insufficient teacher understanding the management of a math lab, by arbitrary use of material as "supplements" to large group basic instruction using chalkboard and rexographs, or by teacher indifference. It is recommended that inservice training direct itself to lab management as well as specific math concept and technique teaching.

The guidelines are very clear as to how children should be selected for participation in the program - a child must score one or more years below grade level on a screening test. Teachers, however, have used a number of other methods to select children (which may be equally valid). These procedures ranged from pretest performance to teacher recommendations and estimates of performance to informal testing. It is believed, as stated above, that this aspect of the program has to be reinforced through the use of a city-wide or district-wide math testing program.

Title I math teachers rated the monthly workshops, given by the math coordinator,as very helpful ($\bar{x}$=4.2 out of a possible 5). Some suggestions made for the improvement of the workshops were: more informative concerning remedial procedures, paras and teachers need separate meetings, workshops in the dynamics of working with small groups.

In contrast, to the classrooms cited above, many other classrooms evinced less efficient management systems. While minimal program standards were maintained in terms of record keeping (files for diagnostic data) some teachers were able to translate this information into more individualized prescriptions. Small groups tended to be heterogeneously formed around a teacher-determined skill which, although necessary, was not matched to specific clusters of student-diagnosed needs. Nevertheless, the majority of these teachers were committed to program goals and were task oriented. They seemed genuinely to want students to succeed, and a positive climate was maintained in these classrooms despite the need for (1) more systematic management of prescriptive information and (2) more diversified learning modalities. The primary reliance in these classrooms is upon single text/workbook approaches, with an emphasis on group seat work rather than a comprehensive use of diversified resources which were in classroom.

Evaluation of Questionnaire Data

Based on the responses of teachers and educational assistants to a comprehensive questionnaire, it was possible to corroborate or refine much of the observational evidence acquired. So with other Title I programs teachers in the Math Component are highly experienced averaging 12.4 years of teaching with a range from 7.5 to 18 years. The average time of involvement in Title I math is 3.2 years. (See Table 2)

Few discrepancies were indicated between the implementation goals written in the Title I proposal and teachers' perceptions of those goals. With few exceptions, the program was started during the first week of October, 1977. Exceptions were due primarily to the need for carefully screening children and for coordination with tax levy teachers. Variations in schools completion of screening would be ameliorated by a city-wide math testing program for grades 1-9. Early student participation and accurate targeting would be facilitated by such a program.

The total number of students targeted for the program was 1,118. Of these 1,075 began participation between September and November. Of these 995 began in October. Less than 3% of the total number of targeted students began after November, a figure which represents a high degree of success in implementation.

Teachers basically rated "pull-out" programs as effective ($\bar{X}$= 4.0 out of a possible 5). There were some suggestions for the improvement of the program. One of the primary suggestions was to schedule the reading and math components at the same time. This would also, they believe, alleviate coordination with tax levy teachers.

Although the pre-and posttesting program was rated as somewhat positive there were many suggestions for change. Some of them were as follows: tests should be made available earlier, administered sooner and the results returned quicker; test only computational skills in a remedial program.

Each teacher rated various aspects of the program ranging from finance to school administration to student performance on a 5 point rating scale going from very ineffective (1) to very effective (5). A perusal of Table 10 shows that most of the ratings are in the range of somewhat effective (3) to very effective (5). Thus, the majority of teachers perceive these varied program components positively. The only area which seems to have some negative perception is the coordination of the Title I program with tax levied. There should be an opportunity for more formalized conferences between tax levied and Title I teachers (1) to provide student mastery of skills information and (2) to provide tax levy teachers with data on types of math techniques which are most effective with pupils.

Table 10

Responses of Math Teachers to the question: How would you rank the following aspects of the program?

Aspects of the Program	Very Ineffective 1	2	Somewhat Effective 3	4	Very Effective 5
a. Amount of financial resources available			25%	75%	
b. Ease of access to those funds		25%	13%	63%	
c. Variety of materials available		14%		43%	43%
d. Significant amounts of materials available			13%	63%	25%
e. The organization of staff			13%	50%	38%
f. Staff spirit or morale				50%	50%
g. Quality of staff performance				25%	75%
h. Quality of projects			33%	67%	
i. Administration			43%	29%	29%
j. Student interest				50%	50%
k. Student motivation				50%	50%
l. Student performance			13%	63%	25%
m. Cooperation from school performance			63%	13%	25%
n. Selection procedures for pupils in the program			38%	50%	13%
o. Physical Facilities	13%		13%	25%	50%
p. Time allotted for pupils receiving instruction			25%	50%	25%
q. Number of pupils in each group			13%	75%	13%
r. Diagnostic evaluation		13%	38%	25%	25%
s. Coordination with tax-levy program	13%	13%	38%	25%	13%

Teachers were asked to list program goals/objectives as they perceive them. Three goals were listed by each of 8 respondents. Thus, there is a possibility of 24 different goals (considering no overlaps). Ideally, there should have been many fewer - that is, there should be some consonance of perceptions in terms of what the ultimate goals are. There was a total of 18 separate goals listed, of which only three dealt with the improvement of achievement in math. I think this is quite an important finding in that based on these goals, teachers will structure their programs in different ways in order to achieve their goals. This is confirmed also by the wide variety of materials in each of the schools. Very few schools are using the same materials - they are using materials most pertinent to their goals and teaching styles. I believe it is important that some consensus of goals and objectives be arrived at in the first orientation workshop.

Based on observation of the program, interviews with participating teachers and educational assistance and analysis of the achievement test data it is obvious that the program is adequately providing appropriate remedial services to the participants. The major strength of the program is the small group instructional strategy which is made possible by the teacher/para to pupil ratio. The small group instruction makes it possible to service the individual needs of each participant.

PERCEPTIONS OF SCHOOL PRINCIPALS

The major strengths noted by school administrators included: the extent of teacher and educational assistant dedication, the professional competencies and the abundance and diversification of material resources. Most principals underscored the high level of motivation and enjoyment expressed by students. Also cited was the use of small group interaction to facilitate teachers communicating concepts. Weaknesses were not strongly indicated, with the exception of space limitation, span of grades serviced being too narrow, and unclear references to absenteeism within the pull-out program.

Recommendations

Based on observations, interviews, and questionnaires the following recommendations have emerged. Many represent consensus of opinions from principals, teachers and educational assistants, as well as the suggestions from outside consultants and district office staff.

1. Complete re-cycling of the program.
2. Early workshops be devoted to procedures for grouping students for instruction. This should be based on systematic strategies for diagnosing student needs (based on strengths as well as weaknesses).

3. Early workshops on utilization of the wide array of material resources (kits, manipulatives) in coordination with basic skills instruction.

4. Workshop on record keeping with a follow-up monitoring component to facilitate teachers' maintaining ongoing evidence of student progress.

5. Formalization of the communication channels between tax levy and Title I teachers. A direct, concrete outcome of this coordination might be jointly contributed logs of pupil growth or progress in math. Time for meetings between Title I and tax levy teachers should be made legitimate and formal, rather than informal and "off the cuff."

6. An administrators conference for principals, district office, staff and other resource persons should be held to discuss alternative organizational solutions to facilitate recommendation #4. This should be followed by individual school plans for coordination with tax levy program to be submitted by October 31, 1978.

7. It is recommended that a district wide math testing program be initiated in September 1978 in order to arrive at some consistency in selection of target students by October 1978. This testing program should be articulated with existing city wide standardized testing program.

English As A Second Language
Component No: 5043-81655

Program Description

School District #6 has had many recent arrivals, from Hispanic countries, who have little or no knowledge of the English language. The lack of English language skills prevents them from functioning normally in academic subjects in schools. An intensive program of instruction in E.S.L. which includes the development of oral-aural ability and the development of basic reading skills is essential in assisting these children in overcoming their language handicap. Consequently, the purpose of the Title I E.S.L. Program was to aid in the development of sufficient English language fluency so as to enable the students to move rapidly into the main stream of the regular school program.

The E.S.L. program enriches and intensifies instruction in English by utilizing the oral-aural approach for all children in need of English as a second language. This program was designed to improve the students' ability to understand and speak English by providing an intensive, sequential, small group and instructional program in English as a second language.

Pupils were selected on the basis of performance on the New York City Language Assessment (LAB) test. First priority was given to students who scored at the 20th percentile and below. Pupils with the lowest scores were given priority. Services were provided from grades 1-6 in the Elementary Schools, grades 7-9 in the Junior High Schools.

Considering the student's limited knowledge of the spoken English language, and in some cases no knowledge at all, the program took into account that the participants had to learn to speak before they could read.

An intensive sequential small group instructional program utilizing the oral-aural approach was implemented, using such materials as puppets, pictures, games, filmstrips, etc. Activities also included dialogues, dramatics, mime, all designated to encourage children to use English as a second language. The program developed facility in the use of English language to the point where children could participate in a reading program in English.

The program serviced 90 children in each of ten elementary schools, utilizing teaching teams consisting of one teacher of English as a second language and two educational assistants. Thus nine hundred elementary school students participated. Small group and individualized instructional modes were utilized in 45 minute sessions 3-5 times a week. Each teacher instructed on an average 28 periods a week in the elementary school.

In each of the three junior high schools, 100 students participated. Teaching teams included one teacher, two educational assistants and one B.P.A. Similar instructional modes were utilized to maximize effectiveness of instruction and adult-student ratio. Junior High students attend classes 3 to 5 times per week. Each teacher instructed approximately 25 periods a week.

Record keeping for the program consisted of "pupil participation sheets" maintained by each school, daily logs maintained by educational assistants and monitored/supervised by teacher, and pupil progress profiles including test results: diagnostic, Lab scores, etc.).

EVALUATION DESIGN

Behavioral Objective

Pupils will significantly gain in NCE score as a result of participation in the program. (LAB Test)

Evaluation Design

The purpose of this evaluation is to appraise students progress in English. Pre/posttest measures will be derived from the New York City Language Assessment Battery.

Test Schedule

Pretest:	October, 1977
Posttest:	April, 1978

Statistical Analysis

A t-test for correlated samples will be performed on the NCE pre- and posttest results.

Results of Pretest/Posttest LAB

NCE predictions were made for participating students in grades 1 through 9. The expectation in calculating NCE is that no participation in an E.S.L. program leads to no change in the original LAB test score, while participation should increase students' communicative skills in oral, aural and basic reading, again as measured by the LAB.

The results presented in Table 11 do show dramatic growth from pretest to posttest, based on NCE, for all grades except 7 and 9. Only grade 7 showed a reversal, with a drop in LAB posttest scores from 3.8 to 2.4 The base LAB facility level of each group at the pretest administration also presented wide discripancies, with the lower grades (with exception of grade 2) reflecting higher language fluency, as measured by LAB, entering the program. It was found that the lower grades (now including grade 2)

also demonstrated the highest magnitude of growth. This may reflect the communicative receptiveness of younger children to E.S.L. instruction and the more resilient nature of non-English dominance in an older student. These are not suggested to be absolute barriers to the acquisition of English language skills, but the differing needs of older students demands scrutiny of alternative strategies for eliciting success in E.S.L. This may mean that specific materials in combination with instructional procedures be identified to service older students, which are distinctively different from those practices which have proved successful in teaching and motivating younger students.

Table 11

PRE & POSTTEST LAB SCORES

Grade	N	NCE Pretest	NCE Posttest	Growth	T-Value	Significance
1	55	6.1	17.7	+11.6	6.14	<.001
2	44	4.3	16.2	+11.9	7.50	<.001
3	69	9.6	18.2	+ 8.6	8.44	<.001
4	91	9.0	16.6	+ 7.6	7.66	<.001
5	98	9.8	14.7	+ 4.9	5.39	<.001
6	66	3.2	7.2	+ 4.0	4.79	<.001
7	25	3.8	2.4	- 1.4	-.35	N.S.
8	46	3.4	5.8	+ 2.4	3.56	<.001
9	23	1.0	1.4	+ .4	1.40	N.S.

Observation of E.S.L. Program

An observational format similar to Title I Corrective Reading and Math was used to assess various components of the E.S.L. program, including:

1. Overall organizational plan.
2. Continuity of instructional objectives.
3. Utilization of LAB data in placement of students.
4. On-going assessment plan.
5. Diversity of resources/utilization of resources.
6. Evidence of plan for individualization and grouping.

Most of the classrooms observed presented some evidence of systematic plans for implementing an E.S.L. program. The basic objectives to facilitate student's development of oral/aural abilities and basic reading skills are in themselves so comprehensive in scope as to lead to a confusion of effective strategies. It is difficult to break down objectives for E.S.L., as defined here, without an unmanageable fragmentation. Teachers in E.S.L. Labs basically depended upon traditional E.S.L. pattern drills for "large" small groups and upon the use of primary level reading skill materials, none of which were specifically designed for second language learners.

The utilization of diverse materials or alternative instructional stratagies was infrequently observed. Although labs often had abundant material facilities for systematic role play, participatory language games, and even audio-visual "lab" approaches, these alternatives were insufficiently used either as mainstays or supplements to the program.

Teachers varied in their philosophy of E.S.L. which also accounted for a source of some confusion. LAB data was not necessarily seen as a potential resource for regrouping students based upon personalized objectives. (Certainly, this is not an optimal use of LAB, but it is a possibility when faced with the absolute absence of other linguistic assessment instruments.) With few exceptions, teachers did not carefully maintain on-going records of specific oral/aural language skills acquired through program of instruction.

The climate in classrooms was basically positive, and students seemed motivated to achieve the ends their teachers presented. Nevertheless, these goals need refinement in terms of a minimal language competency accountibility system to serve as a base from which teachers can record student progress and challenge students with a wider variety of instructional opportunities/resources. Such a system might be correlated with basic categories found in the LAB or any other assessment tools. The overlap between students in need of a purely corrective reading program and those in need of E.S.L. should also be clarified to facilitate the most appropriate delivery of services to students.

Questionnaire Data

Title I E.S.L. is implemented by highly experienced personnel (average teaching time is 16.4 years; average time in Title I E.S.L., 7 years); thus, the need to train staff in rudements of the instructional program are minimized.

In the elementary program, teachers average 28 periods per week meeting students an average of 4.4 times. In the junior high school this

average is 25 periods, with students serviced an average of five times per week. The slight discripancy found between number of periods per week reported by teachers and the number stated in the proposal seems to be a function of the non-program duties assigned to some teachers. This discrepancy is also found in Title I Reading and Math.

An often cited weakness in the program both in teacher questionnaire and the principals' opinionnaire was lack of coordination with tax levy program. More formal consultative arrangements between tax levy and Title I teachers is recommended.

One of the major difficulties with the E.S.L. component has been the adequency of procedures for targeting children for the program and the corresponding measurement of student progress. The reason for this has been the lack of appropriate standardized tests. When asked how did you "target" children to participate in this program, the range of responses was varied. Responses ranged from the use of the Language Assessment Battery to informal testing of new arrivals to teacher judgment, etc. This is a critical point in light of the fact that the program proposal specifies, "Pupils are selected on the basis of performance on the New York City LAB test. Pupils with the lowest scores are given priority." Again, this discrepancy reflects the perception of the professional staff in the use of the LAB to make placement decisions. This coincides with one of the primary recommendations of the teachers to replace the LAB test with something else. It should be noted that no substantive recommendation was made, only generalities. This contention is serious in light of the fact that the LAB is used to assess student progress. The teachers are expressing the perception that they have little confidence in the LAB as a screening instrument or as a test to measure student progress. Further, the pre-posttesting program, using the LAB, was rated 2.25 out of a possible 5 by the teachers. This again shows dissatisfaction with the testing program.

It is recommended that a committee work to identify alternative means to place students and monitor their progress. These recommended alternative instruments should be in place by Spring 1979.

Most aspects of program functioning were rated positively by the E.S.L. teachers. The only areas which were rated below average effectiveness were: amount of financial resources available, ease of access to those funds, and diagnostic evaluation (again referring to the LAB). The principals' opinionnaire also noted that alternative diagnostic tools are necessary to place and monitor student performance.

The monthly workshops were rated as somewhat helpful by the respondents ($\bar{x} = 3.33$). Suggestions for the improvement of the workshops were to have workshops conducted by colleagues, have citywide conferences, have demonstrations of latest materials, have inter-school visitations.

Another area of concern is that of the coordination of the supplementary program with the tax-levy program. All of the coordination was done in an informal manner during lunch or common preparation periods. It was suggested that formal conference time be built into the program.

In general, the district office program coordinator was perceived as being quite effective in coordinating the program ($\bar{x} = 3.75$).

All teachers were asked the following question: "What do you see as the three major goals/objectives of your program?" It is interesting to note the basic agreement of opinion, corresponding to the program proposal which specifically states the program is designed to improve the students' ability to speak and understand English. There are a number of subordinate objectives, which relate to the above, to which the teachers also devote energies, such as get students to read and write in English, teach reading readiness, mainstreaming etc. These results are encouraging; that is, program teachers are basically trying to achieve the first order objective specified in the program proposal.

Listed below are some of the instructional materials considered to be "good" by the teachers (their responses span all grade levels).

- Realia
- English Around the World
- Puppets
- Audio Visual English - Mac Millian
- Language Rehabilitation Programs

There was very little agreement amoung teachers as to which were the 'best' instructional materials. The materials one uses is a matter of individual preference and style. I think it also points out the fact that there are few materials available.

Recommendations

The major recommendations for this component are as follows:

1. Formalization of communication process between the E.S.L. teacher and the classroom teacher.

2. Provide E.S.L. workshops for classroom teachers so they will be able to reinforce the structures taught in the E.S.L. component. In line with this, it is recommended that the E.S.L. component be recognized so that it functions in each classroom. In this way the classroom teachers will be provided models to teach E.S.L. methodology. Thus E.S.L. would function as a coordinated classroom/pull-out program thus facilitating continuity with tax levy instruction.

3. Allow for the replacement of students with poor attendance.

4. Secure or develop a more appropriate E.S.L. test for placement and measurement of student progress. This should be accomplished by a committee.

5. Careful scrutiny of differences in E.S.L. growth between students in lower grades and those in upper grades is recommended, with opportunites provided to identify distinctively effective E.S.L. strategies for older students.

Project Success
Component No: 5043-81656

PROJECT DESCRIPTION

Project Success attempted to facilitate the academic performance and personal/social adjustment in District 6 schools of pupils experiencing severe retardation and non-achievers. Because of the depth and extent of the educational retardation of these students a high degree of individualized instruction was required.

The program serviced children who were functioning in reading and/or math three or more years below grade level.

The program employed a highly structured intensive approach to remediating the reading and math achievement of participating pupils. The approach employed consisted of the Innovative Science Thinking Skills program for reading and math development, and language development. The program stressed the development of basic competence in reading and math. In addition it emphasized thinking skills, problem solving and reasoning. The program stressed thinking and transferability to other curriculum areas. Emphasis was placed on how an answer was arrived at, leading to positive interaction among members of the instructional group. The materials employed were highly relevant and interesting to the pupil population. Students acquired the capability of reasoning in the learning environment and were stimulated and motivated by their recognition of this newly discovered capability.

It was believed that with a group as retarded in reading and math skills as these (i.e. 2 or more years), that in order for a remedial program to be somewhat effective, direct counseling and guidance service had to be provided. The supportive services of the guidance personnel involved direct intervention in both a developmental and prescriptive phase. In the developmental phase the counselor worked directly with eligible participants to prevent problems which could impede learning.

Project Success provided two teachers and four educational assistants to supplement the classroom work of two teachers paid with tax levy monies.

Every pupil who participated in the program participated with the consent of a parent. It is also planned when a pupil is returned to his home school, after completion of his attendance in Project Success, provision will be made for follow-up at the home school. The follow-up will include placement in appropriate remedial programs and consultation with the child's tax levy teacher and the school's administrative staff. Project staff will continue to provide guidance services and will also continue to coordinate service with other external agencies.

Each group received educational services from a tax levy teacher (there were two tax levy teachers). In addition, pupils received one instructional period a day, five days a week for 20 weeks from a Title I teacher in reading. Thus each pupil will receive a total of 75 hours of specialized reading instruction. In other words, it was anticipated that two groups of 60 children each would participate in either the reading or math component. The Title I teachers worked with a maximum of 6-10 pupils during any instructional period. The Title I teachers were assisted by four (two each) well trained educational assistants assuring continuity of efforts, and a well implemented, integrated, instructional plan for each child. The educational plan for each child was regularly reassessed and his/her growth and achievement monitored to assure continuing maximum progress.

EVALUATION DESIGN

Behavioral Objective

Fifty percent of the pupils participating in the program will show a statistically significantly gain in achievement when compared to projected growth using the SED Historical Regression Formula. Achievement gain will also be shown using pre and posttest results through the use of the Stanford Achievement Test in reading and math.

Evaluation Design

The design of this evaluation will comprise pre-posttesting with the appropriate levels of the Stanford Achievement Test in reading. Growth will be determined in relation to the SED historical regression formula.

Test Schedule

Pretest:	October, 1977	Form B
Posttest:	May, 1978	Form A

READING AND MATH ACHIEVEMENT DATA

As part of the evaluation of Project Success all students were administered Form B of the Stanford Achievement Test in October 1977 and Form A in May 1978. The levels administered at each grade level and component is specified below:

	Reading	Math
Grade 4 -	Primary III	Primary III
Grade 5 -	Primary III	Inter I
Grade 6 -	Inter I	Inter II
Grade 7 -	Inter II	Inter II
Grade 8 -	--	Advanced
Grade 9 -	--	Advanced

Tables 12 and 13 presents the average pre-and posttest grade equivalent scores for the reading and math component. In addition, predicted posttest and the correlated t-test values and significance values between actual posttest and predicted posttest are provided. The tables indicate the 57 children in the reading component were pretested and in the math component 60 children were pretested. These figures are drastically reduced for the posttest. It is important to note when reviewing thses data that the size of the N's are relatively small. In no instance is the N between actual posttest and predicted posttest greater than 18, in all other cases it is based on 10 or fewer scores. The interpretation of inferential statistics which are based on small Ns should be done with caution. A more reliable index of program growth may be merely the observation of growth from pre to posttest (again keeping in mind the small Ns). These data appear in tables 12 and 13 under the heading "growth". For the reading component, the only grade which shows statistically significant differences between actual posttest and predicted posttest is grade 5. Growth from pre to posttest at grade 4 was 0, at grade 5, 9 months, at grade 6, 7 months, and at grade 7, 8 months. The average length of time in the program was 5.8 months; thus growth in grades 5, 6 and 7 is better than a month for month progression. These data are difficult to interprete because students statred in the program at different times. It was difficult to recruit students to participate in the program (to be discussed below).

Approximately 40% of the students entered the program between September 1977 and December 1978, consequently, the remaining 60% started the program between January 1978 and April 1978. It thus appears that the average exposure to the Project Success treatment is quite varied (the SD of length of time in the program is 2.5 months).

The math component shows no statistically significant differences between actual posttest and predicted posttest. Growth from pre-to posttest ranges from - 9 months to +1.6 months at grade 8 (based on an N of 1). Again, realize that these data are based on small Ns.

Observation of the Program

Project Success had many difficulties in the implementation of the program. The original site of the program was to be a location at North Presbyterian Church. However, primarily because of leasing and contractual difficulties at the central board, this site could not be secured. Thus, in September 1977 the program was implemented in very cramped quarters at the District Office. This led to many of the difficulties in securing a population to participate. The District Office was not centrally located for travel; many parents did not want their children to travel that distance. It was not until after the first of the year that the program was relocated at Junior High School 164. This facility was more appropriate to the total intergrated education of the population - including lunch, gym, etc. It was at this time that the program was able to get additional students to participate in the program. In general,after this point, the program was implemented as intended in the Title I proposal.

Table 12

PRE AND POSTTESTING USING THE STANFORD ACHIEVEMENT TEST-READING

Grade	N		Pretest	Posttest	Growth	Predicted Pretest	T-Value Post vs. Pred.	Significance
	Pre	Post						
4	7	6	1.7	1.7	0	1.9	-.943	N.S.
5	20	18	2.1	3.0	.9	2.3	4.54	<.001
6	11	9	3.1	3.8	.7	3.4	1.943	N.S.
7	19	10	3.4	4.2	.8	3.7	1.681	N.S.

Table 13

PRE AND POSTTESTING USING THE STANFORD ACHIEVEMENT TEST-MATH

Grade	N Pre	N Post	Pretest	Posttest	Growth	Predicted Pretest	T-Value Post vs. Pred.	Significance
4	5	5	1.7	2.2	.5	1.8	.664	N.S.
5	19	18	2.8	3.4	.6	3.1	.985	N.S.
6	10	7	4.2	5.2	1.0	4.5	.656	N.S.
7	16	10	4.4	5.1	.7	4.8	.853	N.S.
8	7	1	4.0	5.6	1.6	4.3	Only 1 child took posttest	
9	3	2	4.0	3.1	- .9	4.4	-.606	N.S.

41

Instructional materials were utilized by the Title I teachers as specified and a diagnostic prescription program was being implemented. It is the perception of the evaluator that if the average time of attendance was more stable the program could be successful.

Recommendation

It is recommended that the program be re-cycled with the following provisions:

1) A permanent site with reading and math labs be provided at the beginning of the program.
2) Extended out-of-level scaled scores to be used to evaluate the achievement data.
3) Additional in-service training be provided in the diagnostic-prescriptive approach.
4) Provisions be made to discontinue children with behavior problems and learning disabled children.

Non-Public School-Reading Program
Component No. 5043-81657

PROGRAM DESCRIPTION

The Non-Public School program was designed to reinforce on-going reading programs by providing corrective and remedial services to eligible Title I students. Four hundred thirty eight (438) students in grades 1 through 7 were serviced in seven non-public schools. Students in the program attended 45 minute instructional sessions 3-5 times a week (a minimum of 135 minutes per week), taught by a teaching team comprised of one teacher and one educational assistant. Small group and individualized instructional procedures were implemented. Pupil progress was managed and monitored by maintaining pupil progress profiles for each student and pupil participation lists containing pre-posttest scores, diagnostic-prescriptive information and mid year assessment.

The objectives of the program were to provide: 1) small group 5-10 students) and individualized instruction, 2) remediation for children who had basic skills deficiencies in reading, 3) increased exposure to the school library as an incentive to encourage reading growth, 4) increased exposure to audio-visual material will be provided in order to develop the child's perceptual intake. The language Lab offered the opportunity for the student to select his/her own reading material.

This program utilized a diagnostic prescriptive approach to meet the individual needs of identified students. Small group and individual instruction was provided by the reading team (Reading Specialist and Eduactional Assistant). The pupils were involved in a variety of multi-media, multi-sensory activities in as many learning centers as possible, such as the school library and multi-media center. At least one center was provided in each school. Each child had a diagnostic write-up whereby the teacher and paraprofessional were able to plot the individual's growth as he/she progressed and provided individual prescribed instruction.

READING ACHIEVEMENT

As per the evaluation design,each participant in the Non-Public School reading component was administered the Stanford Achievement Test October 1977 and in May 1978. Percentile ranks for pretest and posttest were transformed to normal curve equivalents (NCE) and a correlated t-test performed between pre and posttest NCE scores.

As can be seen in Table 14,grades 1, 2, and 3 achieved statistically significant growth, while grades 4-7 made only minimal progress. In understanding these data it is important to note that participants in grades 5, 6, and 7 were all achieving very close to the 50th percentile of the national norm. In other words, these students were in need of minimal remedial service and thus, growth was not as great as the lower grade level (i.e. the effect of regression towards the norm).

Table 14

PRE & POSTTEST SAT RESULTS

Grade	N	Pretest		Posttest		Growth (NCE)	T-Value	Significance
		%	NCE	%	NCE			
1	15	7	17.9	15	27.7	+9.8	7.31	<.001
2	39	17	29.9	24	34.1	+4.2	2.65	<.01
3	32	23	35.4	27	38.1	+2.7	3.75	<.01
4	14	31	39.4	32	39.8	+ .4	.25	NS
5	16	45	47.25	48	48.77	+1.52	.94	NS
6	9	46	47.34	46	47.73	+ .39	.46	NS
7	30	43	47.26	48	48.96	+1.7	1.70	NS

GENERAL OBSERVATIONS

The program was implemented as indicated in the Title I proposal. One teacher and one educational assistant was assigned to the program. The children receiving instruction on the average 3-5 times per week. Diagnostic profiles were maintained for each student and information shared with the regular teacher in an informal manner. The program had its full contingent of supplies, which were utilized appropriately.

RECOMMENDATION

The program should be fully recycled next year.

Non-Public School - Math Program
Component No. 5043-81658

Non-Public School - E.S.L. Program
Component No. 5043-81659

As indicated in the District 6 Title I Umbrella proposal, the evaluation of these programs is being included in the Central Umbrella Evaluation.

Project Striver
Component No. 5043-88752

PROGRAM DESCRIPTION

Project Striver was a modification of the 1977-78 Title I Umbrella using Impact Aid monies. The program was designed to run from November 1, 1977 to June 30, 1978. The program was to be implemented in 10 elementary schools in grades 4-6.

Project Striver is designed to raise the achievement level for students who are marginal underachievers in reading in grades 4, 5 and 6.

The program provided corrective reading services to Title I eligible students who score below the 50th %ile based on national norms of the N.Y. City Reading Test.

The program utilized a diagnostic-prescriptive approach. Small group and individualized instruction was provided by the Striver reading team, (one teacher and one educational assistant).

A multi-media approach was utilized in order to meet the individual needs of identified students. The program provided structured review of phonetic analysis, structural analysis. Efforts were directed toward building word power and increasing the students vocabulary development. Emphasis was placed on expanding the individuals psycholinguistic ability through the use of such techniques as Cloze. Finally, efforts were made to accelerate each individual pupil's reading rate with the use of hard-ware,such as controlled readers,Tach-x,and accompanying practice materials.

Students received small group (10-15 students) and/or individual instruction 4-5 times per week in a room designated as a reading laboratory. Each child was diagnosed so that his specific deficiences were identified and a prescription for instruction was provided. The approach selected to teach a specific skill was the method found most viable for the student, and materials were selected accordingly.

Each Project Striver Teacher taught a total of 28 forty-five minute periods per week,servicing a total of 75 students. Each group met 3-5 times per week, depending on need. In addition, the Striver Teacher spent one period per week training the Educational Assistants assigned to the program, and one period per week holding individual conferences with the tax-levy teachers of participating students. These conferences were documented in a teacher log.

EVALUATION OF READING ACHIEVEMENT

As part of the effort of determining the effectiveness of Project Striver all participants were administered the following levels of the Stanford Achievement Test-Reading.

Grade	Pretest	Posttest
3	Primary II - Form B	Primary II - Form A
4	Primary III - Form B	Primary III - Form A
5	Primary III - Form B	Primary III - Form A
	Intermediate I - Form B	Intermediate I - Form A

The Title I proposal indicated that the Striver program was scheduled to begin in November 1977. In most instances the program did begin on schedule; however, there were many difficulties with the staffing of the program and staff was changed, in many schools, after the initiation of the program. It was because of this difficulty in staffing the program that the pretesting, as shown below was spread out over basically a three month period - November 1977 to January 1978. Table 15 below shows the number of children tested during each month and the percentage of the total for that month of the 770 children for who some achievement data are available, 151 or 19% were pretested in Nov. 1977, 236 or 31% in December and 378 or 49% were tested in January 1978.

Table 15

FREQUENCY AND PERCENTAGE OF CHILDREN PRETESTED BY MONTH

Month Tested	Number	Percentage
November 1977	151	19%
December 1977	236	31%
January 1978	378	49%
February 1978	5	1%
Total	770	

Thus, the average time between pretest and posttest, which was administered in May 1978 to all participants, was not 7 months but only averaged approximately 5 months. It would seem that especially with this population maximum benefit would be achieved by all participants having had 7 months time lapse between pre-and posttesting.

Table 16 below shows the results of the pre-and posttesting program. Children enter the Striver program reading below the 50th percentile. Using December as a base month the participants are reading between 5 months and 1 year below grade level. Note in parenthesis the standard deviation of the pretest grade equivalent scores. Grades 3, 4 and 5 seem to be characterized by a more homogeneous population than grade 6. Further, the reading retardation is greater at grade 6 than all other grades. It is also

interesting to learn from the table that growth from grades 3-6 shows a continued arithmetic increase - grade 3 shows the least growth, followed by grade 4,then grade 5, and finally grade 6 shows the largest growth of 1.0 years. Grade 6 is the only grade which shows a greater growth rate than month for month progression. Grades 3, 4 and 5 have all shown substantially less growth than month for month progression.

Table 16 also reports the correlated t-value between actual posttest and predicted posttest using the SED historical regression formula. Grade 6 data indicates a statistically significant increase of actual posttest vs. predicted posttest. The results for grades 3, 4 and 5 all indicate that the predicted posttest was statistically greater than that actually achieved. One statistical explanation for this result is related to the homogeneity of variance within each of these grades at pretest time. There are very few extreme scores, at either end; the distribution of scores is basically leptokeurtic. Thus, there is little tendency for the phenomona known as regression to the mean to take place - a handful of scores cannot make the data significant. This finding, however, we believe has implications for the restructuring of the program as well as the analysis of the data. Data, we believe, should be analyzed in terms of NCE growth rather than trying to determine statistical significance. With such homogeneous population significance will in all probability be difficult to attain.

OBSERVATION OF THE PROGRAM

As was the case with all other Title I programs included in the District 6 Umbrella, structured observations of the program were conducted. This program as discussed above was intended to expand the Program for Corrective Reading through the utilization of Impact Aid funding. Project Striver was to be implemented on November 1, 1977 and run through June 30, 1978. The program was designed to service 25 children per grade level in each of grades 4,5 and in 9 elementary schools and grades 3,4 and 5 in one elementary school. As can be seen in Table 10, the program serviced 113 children in grade 3, 264 in grade 4, 209 in grade 5 and 155 in grade 6. Thus, the program did not service the requesite number specified in the proposal. Because the program was implemented after the start of the school year it was difficult to get the requesite number of children because of the high mobility rate in the district.

One teacher and one educational assistant was to be funded for each school. For a number of reasons, basically contractual, the program had many changes in personnel during the first two months of the program. Consequently, the program was late in being implemented. Further, because of changes in personnel, instructional materials were not ordered at the beginning and,as discussed above,the pretesting program was spread out over a four month period. Observation of the program indicated that there was a sparsity of materials until close to the end of the program when materials arrived.

Table 16

PRE AND POST SAT RESULTS

Grade	N	Pretest	Posttest	Growth	Predicted Pretest	T-Value Post vs. Pred.	Significance
3	113	2.9 (.6)	3.2	.3	3.4	-2.650	<.010
4	264	3.6 (.6)	4.0	.4	4.1	-2.008	<.046
5	209	4.7 (.8)	5.2	.5	5.3	-2.196	<.030
6	155	5.4 (1.0)	6.4	1.0	6.0	5.627	<.001

Table 17

Responses of Striver Program teachers to the question:

How would you rate the following aspects of the program?

Aspects of Program	Very Ineffective				Very Effective
	1	2	3	4	5
a. Amt. financial resources	38%	25%	25%		13%
b. Access to above	25%	25%	50%		
c. Variety of materials	25%	50%	25%		
d. Significant amounts of materials available	25%	38%	25%	13%	
e. The organization of staff			38%	50%	13%
f. Staff spirit or morale	13%	25%	25%	13%	25%
g. Quality of staff performance			29%	43%	29%
h. Quality of projects		13%	25%	63%	
i. Administration	14%	14%	29%	43%	
j. Student interest	13%	13%	13%	50%	13%
k. Student motivation	13%	13%	25%	25%	13%
l. Student performance		22%	44%	33%	
m. Cooperation from school personnel		43%	43%	14%	
n. Selection procedures for pupils in the program		13%	63%	25%	
o. Physical facilities	38%	38%		13%	13%
p. Time allotted for pupils receiving instruction	13%		63%	38%	
q. Number of pupils in each group			63%	38%	13%
r. Diagnostic evaluation	13%	38%	63%		
s. Coordination with tax-levy program	38%	50%	13%		

In all other instances of observation, the program was being implemented as written in the Title I proposal. The Striver program was run as a diagnostic-prescriptive program; children's needs were diagnosed using basically the Durrel and Roswell-Chall. Small group and individualized instruction was observed in the classrooms.

EVALUATION OF QUESTIONNAIRE DATA

As can be seen in Table 2 the Striver program did have 10 teachers and 10 educational assistants working in it. The teachers had an average of 11.8 years of teaching experience.

The teachers were receiving groups 28 periods per week, with the majority servicing the groups 4 times per week, and never less than 3 times per week.

Table 17 shows the responses of Striver teachers ratings to a number of different aspects of the program. As with the corrective reading teachers and JHS reading teachers, the program is basically rated as positive. The areas which seem to be of some concern to the teachers are amount of financial resources and access to these funds, variety of materials (confirmed by observation), physical facilities (since the program was a modification of the Title I program, physical facilities were sometimes less than desirable), diagnostic evaluation, and coordination with tax-levy program.

Table 18 below are the ratings of Striver teachers to various district support services of Title I. Using a 5 point scale most of the ratings are neutral, except for pre and posttesting and administrative support. Both of these low ratings can be directly traced to the late start of the program.

Table 18

TEACHER PERCEPTION OF DISTRICT SUPPORT SERVICES

	Average Ratings
Workshops	3.38
Pull-out program	3.60
Pre-posttesting	2.88
District Staff Liaison	3.86
Administrative Support	2.87

Another question asked all respondents to prioritize the appropriate activities of an Educational Assistant. Table 19 summarizes these data.

Table 19

RANK ORDERING OF ACTIVITIES OF EDUCATIONAL ASSISTANTS

	Striver Teacher	Striver E.A.
Review	4.86 (4)	6.33 (8)
Drill	3.83 (3)	5.22 (5)
Present New Materials	6.8 (8)	4.55 (3)
Individual	2.13 (1)	2.66 (2)
Small Group	2.38 (2)	1.77 (1)
Grading	5.4 (5)	4.75 (4)
Liaison w/Parents	8.3 (9)	10.16 (11)
Planning	6.14 (7)	6.11 (6)
Clerical	5.75 (6)	6.25 (7)
Test Admin.	9.6 (10)	8.5 (9)
Test Corrections	6.83 (8)	9.16 (10)

There are several distinctive differences in E.A. role perception between teachers in both programs and E.A.'s in both programs, with internal consistence within each role. In activities of "review", "present new material", "grading" there were obvious discrepancies. It must be noted that there were also many consistencies of perception, especially relating to top two priorities (small group work, individualization) and last two (liaison with parents, testing).

Each school principal was also asked to specify, in detail, the major strengths and weaknesses of the program and suggestions for improvement. Listed below is a summary of these responses.

1. Major Strengths

Services provided to students previously bypassed.

Remediation aimed at children with most potential for success.

Staff development.

Diagnosis and small group opportunities.

2. Major Weaknesses

Most frequently cited was the lateness of program's start-up.

Assessment difficulties also identified: late returns of diagnostic information and more opportunities for informal assessment.

Physical inadequcies also cited.

3. Suggestions:

More and diversified materials.

Early start-up in September.

Adequate space.

Recommendations

All of the recommendations made for the Corrective Reading program are applicable to Project Striver. In addition, the following is also offered.

1) The program should begin as scheduled - early in the school year. Every effort should be made to staff the program early.

2) The program at each school should be provided enough physical space to implement the program properly.

3) The Striver program is intended to service marginally achieving students. These are students, who on the average, are .6 to 1.0 months below grade level. The program was designed as a diagnostic-prescriptive remedial program. It is recommended that the program not concentrate on skills development with these marginally reading retarded children, but instead move in the direction of a motivational program.

4) Children should be cycled whrough the program 5 times a week in order to maximize motivation.